

Title (en)  
SEMICONDUCTOR LIGHT EMITTING DEVICE

Title (de)  
LICHTEMITTERENDES HALBLEITERBAUELEMENT

Title (fr)  
DISPOSITIF ELECTROLUMINESCENT SEMI-CONDUCTEUR

Publication  
**EP 1597776 B1 20150401 (DE)**

Application  
**EP 04702280 A 20040115**

Priority  

- DE 2004000040 W 20040115
- DE 10308866 A 20030228

Abstract (en)  
[origin: WO2004077578A2] The invention relates to a lighting module comprising at least one thin-film light-emitting diode chip, which is placed on a chip support provided with electrical supply conductors and which has a first and a second electrical connection side and as well as an epitaxially produced semiconductor layered construction. The semiconductor layered construction has an n-conducting semiconductor layer, a p-conducting semiconductor layer, and a region, which is situated between these two semiconductor layers, produces electromagnetic radiation, and which is placed on a support. In addition, the lighting module comprises a reflective layer. This reflective layer is located on a main surface facing the support and reflects at least a portion of the electromagnetic radiation, which is produced in the semiconductor layered construction, back into said the semiconductor layered construction. The semiconductor layered construction comprises at least one semiconductor layer having at least one microstructured rough surface. The decoupling surface of the thin-film light-emitting diode is defined, in essence, by a main surface facing away from the reflective layer and does not contain housing material such as potting material or encapsulating material.

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Citation (examination)  

- DE 10010638 A1 20010913 - OSRAM OPTO SEMICONDUCTORS GMBH [DE]
- JP 2002359403 A 20021213 - NICHIA KAGAKU KOGYO KK
- JP H10233532 A 19980902 - HOSHIN KAGAKU SANGYOSHO KK

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DE

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